

CLAIMS

1. A method for generating an Identification and Verification Template (IVT) comprising the steps of:

obtaining a user biometric; and

generating a dependency vector from the user biometric;

such that the template is bound cryptographically to the user.

2. The method of claim 1, wherein the dependency vector includes check digits of the user biometric using an error correcting code.

3. The method of claim 1, wherein a canonical user biometric is generated from a function of multiple readings of the user's biometric.

4. The method of claim 3, wherein the function is a majority decoding function.

5. The method of claim 1, in which the template contains public identification information.

6. A method for uniquely identifying a user via biometric analysis comprising the steps of:

acquiring an input comprising a User Biometric from a reader (UB);

an input comprising an IVT from a token or card; and

performing a validation protocol given as input the user's biometric (UB) and the IVT, whereby a decision value is computed giving either "AUTH" or "Other", where "Other" may be anything else but "AUTH".

7. The method of claim 6, in which the validation protocol is a cryptographic validation mechanism for an authentication scheme.

8. The method of claim 6, where the user biometric is an iris scan or a portion of an iris scan.

9. The method of claim 6, where the user biometric (UB) is derived from a function of multiple scans of the biometric.

10. The method of claim 9, where the function includes the use of majority decoding.

11. The Method of claim 10, where the function includes error correction of the biometric component after majority decoding is applied.

12. The method of claim 6, where the biometric registration template incorporates a password encrypted value of the registration template.

13. A method of secure pattern recognition is provided comprising the steps of:
acquiring a first pattern;
combining the pattern with authenticating information;
encrypting the combination of the pattern and the authenticating information to provide a template;
acquiring a second pattern; and
processing the second pattern and the template to determine if the first pattern and the second pattern are the same.

14. A method of providing an individual verification template comprises the steps of:
acquiring a biometric pattern from an individual; and
cryptographically combining the biometric pattern with authenticating information to provide the individual verification template.